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Nucleotide Sequence of Rhesus Monkey Dkk-1 (SEQ ID NO:1)

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atgatggctc tgggcgcagc aggagctgcc cgggtcttgg tcgcgctggg agcggcggct 60
cttggcggcc accctctgct gggagtgagc gccacettga actcggttct caattccaac 120
gcgatcaaga acctgcccc accgctgggc ggcgctgcgg ggcacccagg ctctgcagtc 180
agcgccgcgc caggaattct gtaccggggc gggaataagt accagaccat tgacaactac 240
cagccgtacc cgtgcgcaga ggatgaggag tgcggcactg atgagtactg cgctagtccc 300
acccgcggag gggacgcggg cgtgcaaate tgtctgcct gcaggaagcg ccgaaaacgc 360
tgcatgcgtc acgctatgtg ctgccccggg aattactgca aaaatggaat atgtgtgtct 420
tctgatcaaa ataatttccg aggggaaatt gaggaaacca ttactgaaag ctttggtaat 480
gatcatagca ctttggtatg gtattccaga agaacaacat tgtcttcaaa aatgtatcac 540
agcaaaggac aagaaggttc tgtgtgtctc cggatcatcag actgtgccac aggactgtgt 600
tgtgctagac acttctgggc caagatctgt aaacctgtcc tcaaagaagg tcaagtgtgt 660
accaagcata gaagaaaagg ctctcatggg ctagaaatat tccagcgttg ttactgcgga 720
gaaggctctg cttgccggat acagaaagat caccatcaag ccagtaattc ttctaggctt 780
cacacttgtc agagacacta a 801
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FIG.1

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Amino Acid Sequence of Dkk-1 Protein (SEQ ID NO:2)

1 MMALGAAGAA RVLVALVAAA LGGHPLLGVs ATLNSVLNSN AIKNLPPPLG GAAGHPGSAV
61 SAAPGILYPG GNKYQTIDNY QPYPCAEDEE CGTDEYCASP TRGGDAGVQI CLACRKRRKR
121 CMRHAMCCPG NYCKNGICVS SDQNNFRGEI EETITESFGN DHSTLDGYSR RTTLSSKMYH
181 SKGQEGSVCL RSSDCATGLC CARHFWSKIC KPVLKEGQVC TKHRRKGSHG LEIFQRCYCG
241 EGLSCRIQKD HHQASNSSL HTCQRH

FIG.2

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Alignment of Dickkopf-1 Nucleotide Sequences

	101		150
Rhesus_Dickkopf-1A	TGATGGCTCT	
Human_Dickkopf1A	TGATGGCTCT	
	151		200
Rhesus_Dickkopf-1	GGGCGCAGCA GGAGCTGCCC GGGTCTTGGT CGCGCTGGTA GCGGCGGCTC		
Human_Dickkopf1	GGGCGCAGCG GGAGCTACCC GGGTCTTTGT CGCGATGGTA GCGGCGGCTC		
	201		250
Rhesus_Dickkopf-1	TTGGCGGCCA CCCTCTGCTG GGAGTGAGCG CCACCTTGAA CTCGGTTCTC		
Human_Dickkopf1	TCGGCGGCCA CCCTCTGCTG GGAGTGAGCG CCACCTTGAA CTCGGTTCTC		
	251		300
Rhesus_Dickkopf-1	AATTCCAACG CGATCAAGAA CCTGCCCCCA CCGCTGGGCG GCGCTGCGGG		
Human_Dickkopf1	AATTCCAACG CTATCAAGAA CCTGCCCCCA CCGCTGGGCG GCGCTGCGGG		
	301		350
Rhesus_Dickkopf-1	GCACCCAGGC TCTGCAGTCA GCGCCGCGCC AGGAATTCTG TACCCGGGCG		
Human_Dickkopf1	GCACCCAGGC TCTGCAGTCA GCGCCGCGCC GGAATCCTG TACCCGGGCG		
	351		400
Rhesus_Dickkopf-1	GGAATAAGTA CCAGACCATT GACAACTACC AGCCGTACCC GTGCGCAGAG		
Human_Dickkopf1	GGAATAAGTA CCAGACCATT GACAACTACC AGCCGTACCC GTGCGCAGAG		
	401		450
Rhesus_Dickkopf-1	GATGAGGAGT GCGGCACTGA TGAGTACTGC GCTAGTCCCA CCCGCGGAGG		
Human_Dickkopf1	GACGAGGAGT GCGGCACTGA TGAGTACTGC GCTAGTCCCA CCCGCGGAGG		
	451		500
Rhesus_Dickkopf-1	GGACGCGGGC GTGCAAATCT GTCTCGCCTG CAGGAAGCGC CGAAAACGCT		
Human_Dickkopf1	GGACGCGGGC GTGCAAATCT GTCTCGCCTG CAGGAAGCGC CGAAAACGCT		
	501		550
Rhesus_Dickkopf-1	GCATGCGTCA CGCTATGTGC TGCCCCGGGA ATTACTGCAA AAATGGAATA		
Human_Dickkopf1	GCATGCGTCA CGCTATGTGC TGCCCCGGGA ATTACTGCAA AAATGGAATA		

FIG.3A

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	551		600
Rhesus_Dickkopf-1	TGTGTGTCTT CTGATCAAAA TAATTTCCGA GGGGAAATTG AGGAAACCAT		
Human_Dickkopf1	TGTGTGTCTT CTGATCAAAA TCATTTCCGA GGAGAAATTG AGGAAACCAT		
	601		650
Rhesus_Dickkopf-1	TACTGAAAGC TTTGGTAATG ATCATAGCAC TTTGGATGGG TATTCCAGAA		
Human_Dickkopf1	CACTGAAAGC TTTGGTAATG ATCATAGCAC CTTGGATGGG TATTCCAGAA		
	651		700
Rhesus_Dickkopf-1	GAACAACATT GTCTTCAAAA ATGTATCACA GCAAAGGACA AGAAGGTTCT		
Human_Dickkopf1	GAACCACCTT GTCTTCAAAA ATGTATCACA CCAAAGGACA AGAAGGTTCT		
	701		750
Rhesus_Dickkopf-1	GTGTGTCTCC GGTTCATCAGA CTGTGCCACA GGACTGTGTT GTGCTAGACA		
Human_Dickkopf1	GTTTGTCTCC GGTTCATCAGA CTGTGCCTCA GGATTGTGTT GTGCTAGACA		
	751		800
Rhesus_Dickkopf-1	CTTCTGGTCC AAGATCTGTA AACCTGTCCT CAAAGAAGGT CAAGTGTGTA		
Human_Dickkopf1	CTTCTGGTCC AAGATCTGTA AACCTGTCCT GAAAGAAGGT CAAGTGTGTA		
	801		850
Rhesus_Dickkopf-1	CCAAGCATAG AAGAAAAGGC TCTCATGGGC TAGAAATATT CCAGCGTTGT		
Human_Dickkopf1	CCAAGCATAG GAGAAAAGGC TCTCATGGAC TAGAAATATT CCAGCGTTGT		
	851		900
Rhesus_Dickkopf-1	TACTGCGGAG AAGGTCTGTC TTGCCGGATA CAGAAAGATC ACCATCAAGC		
Human_Dickkopf1	TACTGTGGAG AAGGTCTGTC TTGCCGGATA CAGAAAGATC ACCATCAAGC		
	901		950
Rhesus_Dickkopf-1	CAGTAATTCT TCTAGGCTTC AACTTGTCA GAGACACTAA (SEQ ID NO:1)		
Human_Dickkopf1	CAGTAATTCT TCTAGGCTTC AACTTGTCA GAGACACTAA (SEQ ID NO:20)		

FIG.3B

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Alignment of Dickkopf-1 Amino Acid Sequences

	1		50
Human_Dkk1	MMALGAAGAT RVFVAMVAAA LGGHPLLGV	ATLNSVLN.S	NAIKNLPPPL
Mouse_Dkk1	MMVVCAPAAV RFLAVFTMMA LCSLPLLGA	ATLNSVLINS	NAIKNLPPPL
Rhesus_Dkk1	MMALGAAGAA RVLVALVAAA LGGHPLLGV	ATLNSVLN.S	NAIKNLPPPL
	51		100
Human_Dkk1	GGAAGHPGSA VSAAPGILYP GGNKYQTIDN	YQPYPCAEDE	ECGTDEYCAS
Mouse_Dkk1	GGAGGQPGSA VSVAPGVLYE GGNKYQTLDN	YQPYPCAEDE	ECGSDEYCSS
Rhesus_Dkk1	GGAAGHPGSA VSAAPGILYP GGNKYQTIDN	YQPYPCAEDE	ECGTDEYCAS
	101		150
Human_Dkk1	PTR..GGDAG VQICLACRKR RKRCMRHAMC	CPGNYCKNGI	CVSSDQNHF.
Mouse_Dkk1	PSRGAAGVGG VQICLACRKR RKRCMTHAMC	CPGNYCKNGI	CMPSDHSHP
Rhesus_Dkk1	PTR..GGDAG VQICLACRKR RKRCMRHAMC	CPGNYCKNGI	CVSSDQNNF.
	151		200
Human_Dkk1	RGEIETITE SFGNDH..ST LDGYSRRTTL	SSKMYHTKGQ	EGSVCLRSSD
Mouse_Dkk1	RGEIEESIIE NLGNDHNAAA GDGYPRRTTL	TSKIYHTKGQ	EGSVCLRSSD
Rhesus_Dkk1	RGEIETITE SFGNDH..ST LDGYSRRTTL	SSKMYHSGQ	EGSVCLRSSD
	201		250
Human_Dkk1	CASGLCCARH FWSKICKPVL KEGQVCTKHR	RKGSHGLEIF	QRCYCGEGLS
Mouse_Dkk1	CAAGLCCARH FWSKICKPVL KEGQVCTKHK	RKGSHGLEIF	QRCYCGEGLA
Rhesus_Dkk1	CATGLCCARH FWSKICKPVL KEGQVCTKHR	RKGSHGLEIF	QRCYCGEGLS
	251	272	
Human_Dkk1	CRIQKDHHQA SNSSLHTCQ RH (SEQ ID N0:21)		
Mouse_Dkk1	CRIQKDHHQA SNSSLHTCQ RH (SEQ ID N0:22)		
Rhesus_Dkk1	CRIQKDHHQA SNSSLHTCQ RH (SEQ ID N0:2)		

FIG.4

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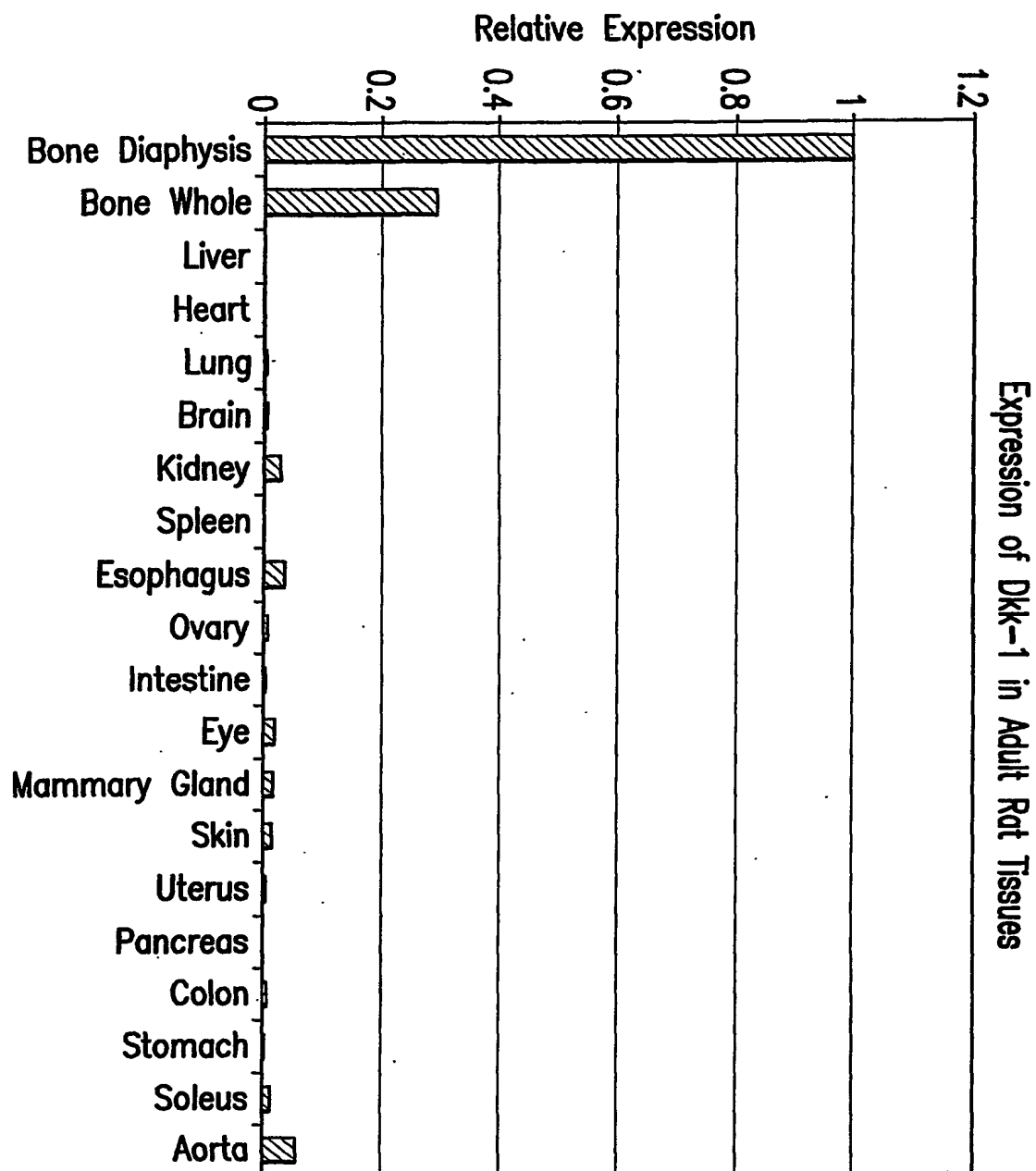


FIG. 5

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FIG.6

